The Child Who Does Not Talk

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• **The majority of normal children will have developed some speech by the age of two years. Significant delay in speech development may be the result of (1) deafness, (2) mental retardation, (3) faulty innervation of the speech organs, (4) aphasia, (5) autism, (6) a family trait, (7) hospitalism, (8) parental neurosis, or (9) some combination of these factors. Each nonspeaking child needs an individually planned study for precise diagnosis and recommendation for treatment.**

THE FAILURE of a child to speak at the expected time will bring inquiries to the child's physician from the worried parents. It is not possible for all physicians to children to be experts in pathologic interference with speech, for it is a difficult and highly specialized subject. But since physicians will be the first consulted about a speech problem, they should know something of the normal patterns of speech development, the acceptable variations, what constitutes an important speech problem and the common causes of speech troubles.[3]

Human speech is an intricate function depending upon the integrity of various areas of the brain, the hearing apparatus, the organs of articulation and phonation and the intelligence; and it is affected by a great variety of psychological experiences. Speech does not arise abruptly, but follows a consistent pattern of development, no matter when it starts. Vocalization beyond crying normally begins in the early months of life, and by the end of the first year the infant makes a variety of sound combinations at various pitches, inflections and volumes, and is aware of the influence of this on others. During the same period the infant responds increasingly to language. By the end of the first year many children have acquired a few true words. From 12 to 18 months there may be little apparent progress in language development, but after 18 months language development should be rapid, and the period from two to four years is a critical one.

A child's speech may be deficient in quantity or in quality. The qualitative defects are the disorders of articulation and phonation. These frequently are functional in the same sense that many childhood problems of eating and elimination are functional. Problems of articulation may be due to organic disorders which, when more severe, limit the quantities of speech. For example, severe deafness of early onset prevents all speech; milder deafness may allow speech with faulty articulation. Anomalies of the speech organs proper, such as cleft palate, usually produce qualitative problems rather than quantitative ones.

In this presentation, discussion will be limited to the child whose speech is delayed in onset. Arbitrarily, it can be said that speech is delayed if it has not appeared by the age of two years. Most children make some sounds and complete mutism is rare, although it may occur in congenital deafness, idiocy, hysteria, schizophrenia and extreme negativism.

There are relatively few causes for delay in speech onset, and I will discuss the eight which are operative in the majority of cases.

1. *Deafness.* Severe deafness of early onset either prevents speech development or quickly abolishes what speech has been developed. A congenitally deaf child may make some of the babbling and cooing noises of infancy, but either stops this or does not progress from there. An alert and experienced mother will be aware of, and complain of, the baby's lack of response to speech and his failure to experiment vocally, so early diagnosis can be made. If the parent is inexperienced, early diagnosis will be made only if the physician in his routine care asks about vocalization and the child's response to voices. In this connection, intact hearing is not proved by a startle reflex, eye blinking, and head and eye turning in response to sound, since these are subcortical reflexes which appear even in the absence of cortical hearing. Excellent methods for training deaf children are available, and early diagnosis will prevent many problems that otherwise will arise.

2. *Mental Retardation.* Mental retardation is an important cause of delay in acquiring speech. Usually the delay in speech parallels the general retardation but frequently is greater than the rest of the retardation, and in my experience only rarely is speech ahead of the general development. Curiously, some mentally retarded children begin at 12 to 14 months to use a few words. They do so for several months and then stop talking, not to begin again un-

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til months or years later. No explanation for this is available.[1] Parents of mentally retarded children often find the delay in speech the most unbearable part of the retardation. They feel that if the child could talk, he would be able to make rapid progress in other areas. Therefore, they often insist on speech therapy. The physician can be of great help to the parents by explaining that speech development in their child is largely a maturational process that cannot be accelerated.

3. *Faulty Innervation of the Speech Organs.* This commonly occurs in conditions where there is bilateral damage to cerebral motor centers. The cerebral spastic exemplifies this. Here again, acquisition of speech is largely a matter of maturation. In these cases, other bulbar impairments usually are obvious.

4. *Aphasia.* The whole matter of aphasia is difficult and is subject to much disagreement. The term *aphasia* is applied to disorders of symbol formation or comprehension in the absence of mental deficiency, motor disturbance or special sense impairment. Presumably, damage of the highest centers is involved, but precise localization is not always possible. The terms *word deafness, impressive (or receptive) aphasia, auditory aphasia* and *sensory aphasia* refer to a specific inability to understand the spoken word. A child with auditory aphasia may develop a language of his own, termed *idioglossia* or *idiolalia.* The terms *expressive aphasia* or *motor aphasia* refer to an inability to create speech, or at least meaningful speech, even though comprehension of language is intact. Although the two entities may occur separately, there frequently is some combination of the two. Diagnosis of aphasia is notably difficult in early childhood because there are no certain landmarks. Contrary to statements found in textbooks, neurological examination, electroencephalography, behavior patterns, use or non-use of gestures, and psychologic tests do not infallibly identify the aphasic child. It is easily understood why these children are frequently regarded in turn as deaf, mentally retarded and emotionally disturbed. A valuable clue to the diagnosis of auditory aphasia comes when a presumably deaf child of good intelligence fails to make progress in a training program for deaf children.[4]

5. *Autism.* Since Kanner[2] described this condition in 1943, it has been recognized with increasing frequency. Autistic behavior occurs in association with a wide variety of organic and emotional disturbances. Primary autism, that is, autism without known cause, is symptomatic in earliest infancy. The infant is not cuddly, and it soon becomes apparent that he is unable to relate to people and situations in the ordinary way, but he does relate well to objects and is bright in appearance. The autistic child has "an obsessive desire for maintenance of sameness,"[2] and fiercely resists external forces to change him. One of the striking features of autism is mutism. When language does develop, it often fails to convey meaning to others. These children live in a world of their own, and others are not permitted to enter into it. Although it is not always possible to make a positive diagnosis easily, the condition need not be considered in a warm, friendly, affectionate child who relates well to his parents.

6. *A Family Trait.* It appears to be true that delayed onset of speech may occur as a family characteristic, especially in male members. In this situation, ultimate normality is the rule. One should be hesitant in accepting this as an explanation, since parents who are seeking a benign diagnosis may unconsciously misrepresent the family history, and this may lead to regrettable delay in establishing a correct diagnosis.

7. *Hospitalism.* Severe speech delay may occur in children who have spent a large part of their early lives in hospitals or institutions in connection with severe and prolonged illness, abandonment or being orphaned. The commendable trend of institutions toward providing stimulation for these unfortunate children should diminish the incidence. A similar problem arises in a home where the child is left alone and systematically ignored, aside from feeding.

8. *Parental Overprotection or Coercion.* There are some neurotic parents whose actions are such that the child is delayed in doing all things for himself, including communicating. There are two types of parents whose actions and attitudes will inhibit speech development in some children. The first are those parents who overprotect their children, who discourage independence and spontaneity in their children, and who do not permit their children to do anything for themselves. The second are those parents, usually highly successful in their occupations, who either wish their children to be prodigies or who cannot bear the long period of immaturity, and who therefore force, push and coerce their children to an impossible degree. Some children appear to shrink from coercive parents by "voluntary silence" or "elective mutism." In these situations, speech delay is only one of the problems, and often not the most significant. Since emotional problems in parents and child inevitably arise when speech is delayed due to any cause, one must be unusually careful not to ascribe causality to an emotional disturbance that may be a result of the speech delay.

Although it is not difficult to find uncomplicated examples of any of the conditions discussed, it is frequently true that multiple causes are present in any given case of speech retardation. Thus, a combination of mild mental deficiency and some deafness is common, giving more speech delay than could be accounted for by either alone. Similarly, a child with organic brain disease often has impairments of a variety of functions involved in speech.

What should be the approach of the physician when he is consulted about speech delay? The family physician or pediatrician may already have information about the child and the parents which will help him decide on a course of action. If one sees the child as a new patient, an exquisitely detailed history is necessary, including questions about the development and present state of the child's vocalization. Since the parents often are unable to describe the child and his speech accurately, it is risky to venture an opinion unless one has an opportunity to observe and hear the child. Observation of the child with his parents often will provide important clues to diagnosis. If the physician cannot decide whether or not a speech problem exists, referral to a speech pathologist is in order. The speech pathologist can determine whether or not a problem exists, and if one does exist he can tell something of its nature and he may be able to suggest some further investigations that are indicated.

Delay in acquisition of speech produces severe parental anxiety and frustration. The frustration is increased by the many incorrect diagnoses that are usually applied to the child. The physician should avoid hasty commitment to any diagnosis, avoid assigning the speech delay to trivial causes, and avoid bland reassurances. Each case needs detailed, individualized study. This study should include, as indicated, an appraisal of the general health, neurologic function, hearing, intelligence, integrity of the speech organs and the emotional climate in which the child lives and has lived. Such a study will permit specific diagnosis which will carry with it implications for treatment and prognosis. Often it may be necessary to study the child over a considerable period before a final diagnosis can be made. The child's response or lack of response to a treatment program—such as a class for the deaf or a special nursery school—may aid in the diagnostic formulation. Unfortunately, parents frequently withhold important information in the early stages of the investigation. The physician should advise the family that the necessary studies will be time-consuming, and he should be prepared to direct the family to the proper facilities and agencies. For an effective diagnostic study, coordination of the efforts of the various specialists is essential, and there must be free communication among the specialists.

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